

Cuban Medical Internationalism: Domestic and International Impacts

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Abstract

Since 2003, Cuba has dramatically expanded its decades-long program of international humanitarian missions. This article explores the political, economic, gender and racial equality dimensions of Cuba's international missions at various scales of analysis. At the macro-level, medical export services have in recent years replaced tourism as a source of hard currency in Cuba, with positive political and economic results. Their impacts on the domestic front are complex. In Cuba, health workers' devalued salaries in a dual economy are a substantive incentive to volunteer for missions abroad. The expansion of international medical missions is thus a means for health professionals—a large part of whom are female, black or mulato—who are otherwise disadvantaged in the dual economy, to improve their livelihoods. It is also re-structuring the delivery of health care in Cuban neighborhoods.

Keywords: *Cuba, international missions, medical diplomacy, race, gender*

Resumen

Desde 2003, Cuba ha expandido dramáticamente su programa, con décadas de historia, de misiones humanitarias internacionales. Este artículo explora las dimensiones políticas, económicas y de género y raza de las misiones internacionalistas cubanas en varias escalas de análisis. A macro-nivel, los servicios médicos de exportación han reemplazado al turismo en los últimos años como fuente de moneda fuerte en Cuba con resultados positivos, tanto en lo político como en lo económico. Sus impactos en la vida doméstica son complejos. En Cuba, debido a la economía dual, los salarios de los trabajadores de la salud se han visto devaluados y esto incentiva a dichos trabajadores a brindarse voluntariamente para las misiones en el exterior. La expansión de las misiones médicas internacionales es una manera de mejorar el estandar de vida de los trabajadores de la salud, de los cuales una gran parte son mujeres, negros o mulatos. La mencionada expansión también trae como resultado una reestructuración de los servicios médicos para la población cubana.

Palabras clave: *Cuba, misiones internacionales, diplomacia médica, raza, género*

Introduction

Cuban international missions have expanded rapidly since 2003. As the political and economic importance of Cuban international medical missions has intensified, scholars have highlighted their associated macro-scale political and economic gains (Huish & Kirk 2007, Bustamante & Sweig 2008, Sancy 2009, Kirk & Erisman 2009). This article argues that the domestic role that international missions play must also be included if one is to fully understand the impact of international missions in contemporary Cuba. From this perspective, international missions represent an important means by which Cuban professionals can use their expertise to earn hard currency abroad, gaining valuable professional experience and political merit while earning a salary in accordance

with their training, experience, and social status. While currently enabling permanent migration for a minority of doctors who defect, the more important domestic impact of temporary international missions may be the restructuring of the health care sector and heightened access to the dollar economy for its workers. The fact that Cuba's medical profession is unique in its gender and racial parity means that international missions are providing groups that have been disadvantaged in the dual economy access to the dollar economy and a higher standard of living. Importantly, this is a step towards mediating the devaluation of professional salaries that has been a source of tremendous discontent and emigration since dollarization was institutionalized over a decade ago.

Although the number of households benefitting economically from international missions is much smaller than from remittances, a growing number of Cubans are participating in missions abroad. Approximately 650,000 of Havana's residents are estimated to receive some form of remittances from family or friends abroad (Diaz-Briquets 2009). From 1998-2008, approximately 185,000 Cubans participated in international missions, 37,000 in the year 2008 alone (Kirk and Erisman 2009). Renewable two-year international service contracts allow professional health care workers to earn hard currency salaries while part of their earnings is paid directly to their families in Cuba. In addition to a monthly incentive that approximately triples a doctor's regular salary, paid directly to the migrant's family, these transnational workers also send home consumer goods (i.e. electronics, clothing) that are not widely available in Cuba. International medical missions thus have enabled tens of thousands of Cubans without relatives abroad to earn hard currency and increase their household's standard of living without having to migrate permanently or seek out higher salaries in a sector where dollar earnings are available.

This study focuses on the effects of Cuba's international missions at various scales of analysis, appealing to the importance of place and scale. Such an approach recognizes that the recent expansion of Cuban internationalist missions and the household and societal-level impacts they engender are historically contingent. The article begins by reviewing the macro-political and economic impact of Cuban internationalism. It then examines how national-level economic policies as well as gender and racial politics have shaped the effects of 'professional export services' at the national, community and household level. The arguments made here draw on primary and secondary sources on Cuban medical internationalism, formal and informal interviews with Cuban health workers and academics in June 2007 and survey data I collected from 88 health workers in Havana in December, 2000. I use the 2000 Havana survey data to illustrate the gains women and Afro-Cubans have made in the health sector. The survey data also effectively demonstrate the disadvantages faced by health professionals in the domestic dual economy, especially prior to the rapid expansion of international missions. By analyzing the impact of Cuban international missions at different scales, this study grounds the missions in the specific context of the development of Cuba's public health sector, international solidarity, the establishment of a dual economy and households' need to seek hard currency. As such it contributes to a more nuanced understanding of Cuban internationalism.

The Political and Economic International Context of International Missions

Cuban international medical programs have grown dramatically since the 1960s. The first instance of Cuban medical diplomacy was a medical delegation sent to Chile following an earthquake in 1960, followed by its first long-term international medical aid program to Algeria in 1963 (Feinsilver 1993). Building on these early successes, in 1984, Cuba announced that it would train 10,000 new doctors to facilitate Cuba's international medical aid. Cuba thus became the first country to train doctors with the

specific goal of exporting their services abroad (Feinsilver 2006). In 1978, Cuba had approximately 2,300 medical personnel overseas, by 2008 that number had increased to more than 37,000 (Grundy and Budetti 1980, Kirk and Erisman 2009).

Early international missions established important diplomatic ties that established Cuban legitimacy independent of its financial patron, the USSR (Bustamante & Sweig 2008: 227). Cuba's political use of international missions to garner goodwill and international solidarity has become even more vital in the post-Soviet period (Bustamante & Sweig 2008, Feinsilver 1993, 2006, 2008, Hammett 2007, Sancy 2009). Through its humanitarian work, Cuba has established a deep reservoir of political capital from which it has successfully drawn to garner international support in spite of U.S. opposition (Feinsilver 1993, 2006, 2008). The ability to export health-care professionals in response to natural disasters and in other situations of need is now central to the reaffirmation of Cuban political legitimacy on the world stage (Hammett 2007).

While Cuban medical, disaster, and educational support missions have a long history of strengthening the revolutionary government's political and ideological standing at home and abroad, only in the past decade have they also provided a substantial economic gain. Cuban missions have recently undergone a major expansion thanks to the financial support of Venezuela's Hugo Chávez. According to the Economist Intelligence Unit, non-tourism services exports--most of which are medical services--doubled (from US\$1.2 to US\$2.4 billion) from 2003 to 2005. Non-tourism services are now earning more hard currency for the Cuban economy than is tourism, which earned US\$2.3 billion (gross earnings) in 2005. In 2003, a new program of cooperation between Cuba and Venezuela allowed the massive expansion of Cuban international aid. Venezuela exchanged oil in payment for Cuban professional services in its efforts to provide comprehensive health care to its own population (*Barrio Adentro*) (see Feinsilver 2008 for more details). Venezuela later extended its sponsorship of Cuban professional export services, financing free eye operations (*Operación Milagro*) and health care workers in Bolivia as part of the Bolivarian Alternative for the Americas (ALBA). Cuba thus has embarked on a new era of exporting professional services to finance the Cuban economy.

International missions have allowed Cuba to fulfill dual goals of capitalizing on its highly educated population as a source of export income while pursuing its humanitarian goals of international solidarity. Cuba's model of charging below-market rates for professional health services has expanded exponentially since 2003 in a win-win situation for poor countries with insufficient medical care. Revenues for services earned from international missions (as well as the licensing and export of Cuban biotechnology and medical treatment to foreigners in Cuba) have become a major source of hard currency earnings, surpassing tourism earnings every year since 2005 (Bustamante & Sweig 2008: 238, Feinsilver 2008). Feinsilver (2008) reported that earnings from medical services equaled 28 percent of total export receipts and net capital payments in 2006, amounting to US\$2,312 million, a figure greater than that for both nickel and cobalt exports and tourism (216). Cuba has embraced the opportunity to extend its public health model through lucrative trade agreements by tapping the expertise of its populace, one of its most valuable resources.

Favorable trade agreements with Venezuela have allowed Cuba to increase its medical service exports to a total of 68 countries in Latin America, Africa, Asia and even the South Pacific (MINSAP, *Anuario Estadístico* 2007: Cuadros 117, 118) (Figure 1). Millions of people with no other access to affordable health care have received free medical treatment by Cuban doctors. In October 2009, the Cuban government reported having 61 ophthalmology centers in 20 countries, having performed more than 1.5 million operations (Cuba Coopera). Since 1998, Cuba has established comprehensive health

programs (Programas Integrales de Salud) in 43 countries, sending medical teams to remote and poverty-stricken areas whose inhabitants had in many cases never had local access to medical care. The “Henry Reeve” brigade, established in 2005, expanded Cuba’s emergency response effort by establishing a contingent that establishes field hospitals in crisis regions in response to natural disasters and outbreaks of epidemic diseases. According to Feinsilver (2008), more than 113,500 health workers (the majority of which are doctors) have completed missions in 103 countries over a span of almost 50 years of medical collaboration. Cuba has also trained and mentored thousands of new doctors by providing scholarships for foreign students to study medicine in Cuba. Havana’s new Latin American School of Medicine (ELAM), founded in 1999, provides free training to more than 10,000 medical students (in addition to another 10-20,000 foreign medical students studying elsewhere).

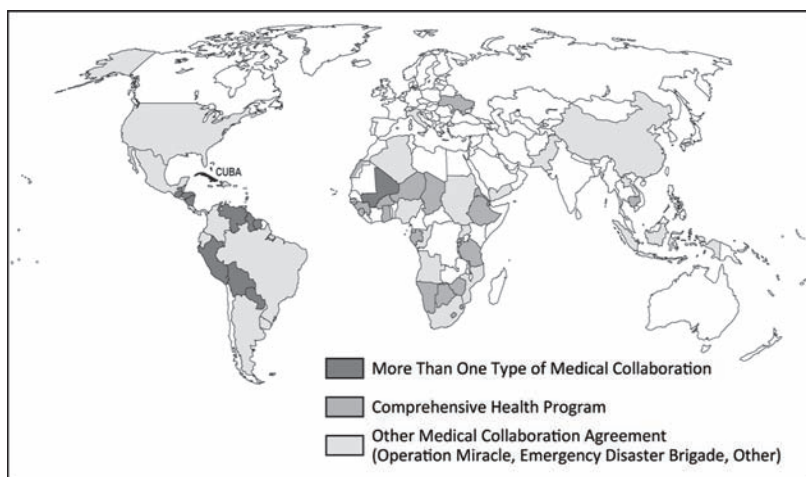


Figure 1: International Extent of Cuban Health Internationalism

While Cuban specialists are providing health care free of charge precisely in underserved regions that suffer from brain drain themselves, the pull of even higher wages in the United States or elsewhere is a constant threat to maintaining Cuba’s internationalist program. The migration of skilled workers (“brain drain”) is especially problematic in countries that have a shortage of health care workers (Huish 2009, Skeldon 2008, Vujicic et al. 2004, Zunn et al. 2002). In Cuba, the concern with brain drain is not a shortage of doctors per se but a concern that the emigration of professionals would cause disturbances in the delivery of social services and deny the state its investment in the education of its professional workers (Pedraza 2003, Wilkinson 2009). A similar combination of push and pull factors that encourage health professionals from other poor countries to emigrate also operate in Cuba (i.e. disillusionment with political and economic conditions at home, the potential to earn higher wages, family networks). The ideological implications of Cuban brain drain, however, are much greater.

Recent U.S. policy has encouraged the defection of Cuban medical personnel working abroad. In August 2006, one month after the health crisis that led to a transfer of power from Fidel to Raúl Castro, the United States enacted a new Cuban Medical Professional Parole (CMPP) program. The CMPP program offers fast track asylum

processing for Cuban medical personnel working in third countries (Carrillo de Albornoz 2006, Feinsilver 2008). Approximately two percent of all doctors defect while working overseas (Andaya 2009), although reports from Solidarity Without Borders, a Miami-based organization that helps Cuban doctors who defect, indicate that defections have risen in the recent past (Ojito 2009, Solidaridad Sin Fronteras).

Humanitarian missions have resulted in significant macro-economic and political returns for the Cuban state. Less attention has been paid, however, to the effects of Cuban international missions on Cuban communities and households. The next section reviews the state-level policies that have shaped the various effects of Cuban internationalism at home, providing context to understand the local effects of expanded international missions.

International Missions and State-Level Policy

At the state level, the effect of international missions has been shaped by the development of the Cuban health care system, domestic economic policy and gender and racial politics. The export of professional health services is only possible today because of decades of knowledge Cubans have gained from their experiences at home and abroad. The emphasis on equality in Cuban society led to significant gains for previously disadvantaged groups, such as women and Cubans of African descent. Considered a vanguard group, health professionals have been specifically disadvantaged in their inability to legally emigrate and in their lack of access to the dollar economy after the 1993-95 economic restructuring.

Cuba's international medical missions have their roots in the transformation of Cuba's own public health care system and in the revolutionary government's commitment to third world international solidarity (Saney 2009). One of the revolutionary government's earliest goals was the creation of an integrated health care system that would provide comprehensive health care for all (Feinsilver 1993). The effort resulted in the world's highest ratio of doctors to population. Cuba went from having one doctor for every 1,393 people in 1970 to one doctor for every 159 people in 2005 (Feinsilver 2006). Cuba's vision of universal health care as a basic human right has always extended beyond its domestic boundaries. Since 1963 Cuba has offered medical services and other civilian aid (engineers, teachers) as part of its internationalist foreign policy based on a philosophy of proletarian solidarity. Cuba provides medical aid in response to natural disasters and in poor, remote areas where little to no access to affordable medical care is otherwise available (Bustamante & Sweig 2008, Feinsilver 1993, Hammett 2007). There is, however, a transactional element to Cuban humanitarianism (Brotherton 2009).

Both the Cuban government and its health workers benefit from international missions, as Cuba earns a percentage of the services rendered and the doctors themselves earn considerably more working under contract abroad than they would at home. The Cuban government receives direct payment for each worker, then pays the worker's regular salary plus \$50/month CUC (convertible currency, Cuba's U.S. dollar equivalent) to family back home for the two years they are working abroad. The government also places \$200/month CUC in a savings account that the worker receives upon his/her return. The hard currency incentive increases to \$100/month CUC if the doctor renews the contract for another two years. This is a large sum of money in Cuba, where a doctor's normal salary ranges from the equivalent of US\$200-\$375 annually. In the host country (where costs of living are generally higher), the international worker receives a monthly salary that varies according to the local pay scale, but which amounts to a stipend of approximately US\$250-\$375 per month to cover food and housing (Feinsilver 2008, Huish and Kirk 2007). Wealthier countries pay substantially more than poorer countries.

In his study documenting Cuban doctors' experiences in South Africa, Hammett (2007) noted that the South African government paid Cuban workers according to its national health system pay scale, which was US\$1500 per month in 2004. Of this amount, the Cuban government levied a 57 percent tax, leaving the Cuban doctor with a US\$645 monthly stipend. Beyond higher salaries, health workers receive other benefits, including the ability to purchase and import consumer goods not affordable at home (i.e. domestic appliances, computers), a chance to advance their knowledge and skills through working in a new environment, and the professional merit that accompanies humanitarian service and foreign travel (not available to the average Cuban citizen). Given the higher pay and benefits, there is no shortage of medical personnel to volunteer to serve in two year missions abroad. Experienced professionals, workers in hospitals or clinics that are targeted as having available staff, and rural practitioners who are seen as less likely to defect are often given preference for overseas missions.

In the context of brain drain and the problematic of retaining health workers in poor countries, the hard-currency incentives paid to internationalista family members in Cuba act as an "escape valve for disgruntled medical professionals" (Feinsilver 2008: 216). The incentives not only compensate key professional workers in Cuba's socialist project, they also bring Cuba in line with supplemental sources of income used to retain public health workers in other low-income countries (WHO 2006). Financial incentives, such as those received by Cuban doctors working in international missions, have been shown to be effective means to retain doctors at home in other low-income countries. Several recent studies in Africa have emphasized the importance of incentives such as hardship bonuses and benefits (e.g. provision of housing and/or a car) in retaining public health workers (Awases et al. 2004, Vujicic et al. 2004, WHO 2006). However, while rewarding specialists who often return with revolutionary passion and renewed commitment to the goals of the revolution (Saney 2009) and providing financial incentives that may prove to counteract brain drain emigration, dramatically unequal pay based on service abroad has led to a new set of tensions among workers in the health sector. Not all health workers have the opportunity or, given complex family situations, the ability to serve two-year missions abroad. The opportunity for increasing numbers of medical professionals to improve their household's standard of living will depend on continued high levels of overseas opportunities.

National Politics of Gender and Race

Women and Afro-Cubans have been an important presence in international missions since their inception. Fidel Castro highlighted women's sacrifice in a speech to the Federation of Cuban Women (FMC) in 1980, observing that "not one woman" had returned home from a two-year international mission because she "couldn't take the conditions" (Smith and Padula 1996: 112). In the 1980s, one-half of the 1,200 teachers sent on Cuba's first literacy campaign mission to Nicaragua were women. While a lack of data documenting the racial classification of health workers serving in international missions (e.g. black, mulatto, white) makes it impossible to conclude decisively, we would expect that racial discrimination does not limit professionals working abroad as it does in the tourist industry. In contrast, blacks are often selected as the "obvious choice" to participate in international missions in Africa and predominantly Afro-descendent societies such as the Caribbean. Just as women's successful participation and advancement in the labor force has been celebrated by the Cuban government, so have the gains of black and mixed-race Cubans, but in a more subtle manner. By sending black and women health workers into the field as highly trained professionals, Cuba is demonstrating one of the important successes of the revolution.

Fifty years of the Cuban revolution have brought a dramatic increase in the proportion of women and Afro-Cubans in the medical professions (de la Fuente 2001, Smith and Padula 1996). Beginning with Cuba's 1962 university reform, which "opened the universities to the people", any qualified individual was given the opportunity to study medicine free of charge (Radio Havana Cuba 2002). Women and blacks—previously limited by a lack of finances, racial discrimination and traditional gender roles—benefitted disproportionately from these openings. The massive outmigration of middle- and upper-class whites (including one-half of all of Cuba's physicians) in the early years of the revolution created a unique opening for the advancement of these newly educated professionals. In the 1950s, only 6% of doctors (but the majority of trained nurses) were women. By 1990, women comprised 48% of all medical practitioners (64% of family doctors) and 87.5% of all nurses (Smith & Padula, 1996). The achievement of gender parity has now evolved into numerical dominance, as women now consist of a majority of doctors on the island. In 2007, women represented 57% of all Cuban doctors (71,656 of 126,377) (MINSAP, Anuario Estadístico 2007: Cuadro 112). Very little data on race are publicly available, but existing data and simple observation indicate that Cubans of African descent have made similar gains. The 1981 census found that 31% of all Cuban health workers were black or mulato, which was almost the ratio reported for the population at large (34%) (de la Fuente 2001: 309). This parity was achieved through a highly centralized control over employment and wages, which since 1993 has been challenged by dollarization and the dual economy.

In what Sawyer (2006) characterized as "inclusionary discrimination," the Cuban state has promoted the participation of blacks (and women in a similar process) while not directly addressing societal prejudices that have limited their advancement. Prejudices rooted in biological conceptions of race and traditional gender roles evolved into discrimination in the 1990s as state influence over earnings waned. A racial bias in emigration and remittance sending and discriminatory hiring (not legal but permitted nonetheless) have disadvantaged blacks in particular in the new economy (Blue 2007, Sawyer 2006, de la Fuente 1998, 2008). New inequalities and old prejudices emerged with the dual economy, and blacks and women are once again among the most economically vulnerable groups (Espina 2009). Professionals in the public health and education sectors, while penalized financially through their lack of access to the dollar economy, have been sheltered from the increased discrimination documented in 'dollarized' segments of the economy.

Blacks have been especially hard-hit by the inequality related to dollarization, appearing to have much more limited access to the dollar economy through remittances, salary incentives or licensed self-employment (Blue 2007: 43-64). Moreover, results from the 2000 Havana Survey reported elsewhere indicated that blacks were more likely than either whites or mulattos to continue to use and have faith in higher education and state employment as a means to achieve a higher standard of living. If this pattern persists in the larger population and in the absence of other channels through which to receive dollars, blacks are in a position to benefit disproportionately from the opportunity to earn hard currency in missions abroad.

Given their primary responsibility for the family unit in Cuban society, Cuban women were more likely to experience unemployment (voluntary or involuntary) during the severe economic crisis of the 1990s (Safa 2009, Uriarte 2002). As food, transportation, and electricity became more irregular, the burden of finding food and other basic household necessities fell primarily to women (Andaya n.d., Fernandez, 2010, Safa 2009). While more women than men left the workforce during the 1990s, government statistics indicate that women have begun to return to the workforce since

2000. Even with a decline in the 1990s, the overall trend has been a marked increase in women's labor force participation since the beginning of the revolution: women comprised only 13% of the labor force in 1956, a proportion that rose dramatically to 37.5% by 1985, to 40.6% in 1993, dropped to 31.5% percent in 1995, rose again to 49% in 2000 and reached 58% in 2007 (Mesa-Lago 2000: table V.17, Safa 2009: 43-45, MISAP 2008: *Indicadores Seleccionados de la Mujer Cubana*). As the proportion of women participating in the labor force and women's educational attainment increased from 2000 to 2007, the proportion of women working in the health professions also increased.

As Cuba continues to train large numbers of health workers, the expansion of public health jobs for export has expanded professional jobs in sectors where women and blacks are well represented. While data on race are not publicly available, there is abundant data on women health workers that document their prominence in public health. The proportion of women in the health sector has grown from 66.2% in 1976 to 70% in 2007 (MINSAP, *Anuario Estadístico 2007: Cuadro 106*). Most women working in the Cuban health care sector are employed as nurses and medical technicians. In 2007, women comprised 88% of all nurses and 76% of all medical technicians (MINSAP, *Anuario Estadístico 2007: Cuadro 109*). In a trend similar to other socialist or former communist countries but still quite uncommon in the rest of the world, women also dominate among physicians (WHO 2008, Riska and Novelskaite 2008). Men in the health sector are more likely to be physicians; in fact, Cuban policy has intentionally aimed at maintaining gender parity as greater numbers of women enroll in medical school (Feinsilver 1993: 105). Vertical (differences according to job status or rank) and horizontal (differences according to specialization) gender segregation is still prevalent in Cuba: while 65% of all pediatricians were women in 2007, only 13% of general surgeons were women in 2007 (MINSAP, *Anuario Estadístico 2007: Cuadro 109*, WHO 2008). This horizontal segregation in the Cuban case, however, has resulted in more women participating in international missions. For example, Operation Miracle has sent hundreds of eye surgeons overseas since 2004, and 73% of all specialized ophthalmologists in Cuba are women (MINSAP, *Anuario Estadístico 2007: Cuadro 112*).

The gains made by women and Afro-Cubans in the health professions is evident in a survey of 334 individual households that a team of ten Cuban interviewers conducted under my supervision in Havana over a three-week period in December 2000 (hereafter referred to as the 2000 Havana Survey). To address the inherent tendency to under-report income and informal activities, the questionnaire for the 2000 Havana Survey was designed to be administered only to individuals with whom the interviewer had *confianza* (confidence). Conducting the anonymous survey through the interviewers' socio networks increased the likelihood of recording truthful and accurate information on topics such as informal economic activity, racial attitudes, migration and remittance history—this was information that was public knowledge among friends. The 334 households that make up the sample population therefore represent the neighbors, friends and associates of ten Cuban research assistants who gathered the data under my supervision. The research assistants included five men and five women of professional or technical background who did not share family, social or professional networks. The 2000 Havana Survey represents a cross-section of Cuban society in December 2000, three years before working on an international mission became a widely available option. Demographic, professional and detailed income data were collected for every member of the household, resulting in data for a total of 753 adults. Of these, 88 individuals in 68 households were health workers, including 40 doctors (including two dentists), 27 nurses, 17 medical technicians, four pharmacists and two dentists.

The 2000 Havana Survey reflects the predominance of women in the health sector, including a slight majority of women working as doctors in Cuba. Women comprised 67 percent of the 88 health workers in the 2000 Havana Survey sample, close to the 72.4 percent recorded by the Cuban government for the total population in 2007 (MINSAP, Anuario Estadístico 2007: Cuadro 106) (Figure 2). Also in line with figures for the total population, 55% of all doctors, 76% of the medical technicians and 78% of the nurses were women (compared to 57%, 76% and 88% women in the total population, respectively). There was a clear pattern of horizontal gender segregation in the sample. Men working in the health professions were significantly more likely than women to be doctors and women much more likely to be nurses or medical technicians.

In an indication that black and especially mulato professionals have achieved parity and beyond in the health sector, the Afro-Cuban health workers comprised a clear majority in this sample (61%), higher than their representation in the total sample (46%). These data indicate that many of the positions in the medical professions are held not only by women but also by black and mulato women, who comprise 44% of the sample (29% mulato women and 15% black women). Of the 40 doctors who reported their

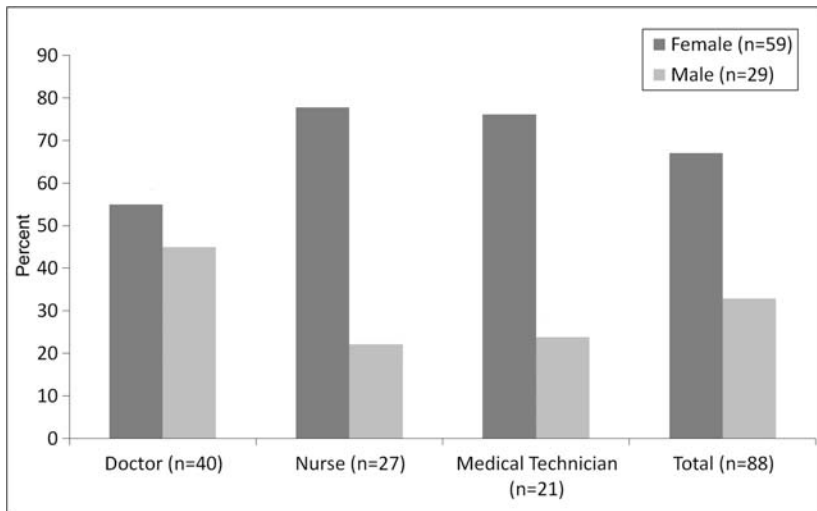


Figure 2: Gender of health workers in 2000

(Note: Medical technicians include four pharmacists).

Source: 2000 Havana Survey, Adults 16-65.

race, 7 were black (5 women) and 13 mulato (6 women)—together 57% of all doctors their race, 7 were black (5 women) and 13 mulato (6 women)—together 57% of all doctors in the study (Figure 3). Black and mulatto Cubans in this sample had even greater representation in the nursing and lab technician professions, together comprising 65% of these workers. Only 12% of the health care workers and only 17% of the doctors in this sample were white men. If the CIA World Factbook figures on race in Cuba from the 2002 census are used for comparison (white 65.1%, mulatto and mestizo 24.8%, black 10.1%), the black and mulato health workers in this sample had achieved not just racial parity but a clear majority. This is an impressive achievement when compared to other societies with histories of African slavery, e.g. blacks, who make up 13 percent of the U.S. population, were only 3.5 percent of U.S. physicians in the United States in 2006 (American Medical Association 2008, CIA World Factbook).

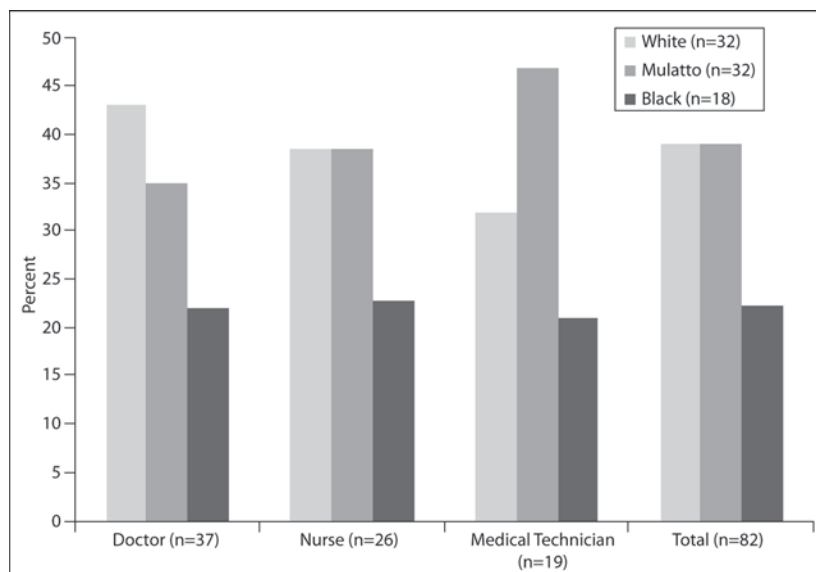


Figure 3: Racial Categories for Cuban Health Workers

Source: 2000 Havana Survey, adults 18-65.

In accordance with the standardized merit pay system in Cuban pesos, black and female medical personnel had achieved income parity with white male colleagues in the same fields. Within Cuba's standardized state wage system, doctor's peso wages were among the highest, providing many blacks and women a relatively high standard of living prior to the introduction of the dual economy. In a multivariate regression on the 2000 Havana Survey data to test the influence of gender and race on income, the results showed that wages were significantly related to occupation but not to gender, race, or experience. In other words, controlling for one's occupation as a doctor versus nurse, medical technician or pharmacist, neither gender nor race were significant factors in determining income. Those income equality gains were eroded by the dual economy and the disadvantaged economic position of health workers, as will be demonstrated below.

Economic Crisis, Dual Economy and Economic Vulnerability

The 1993 legalization (or "de-penalization") of the U.S. dollar and creation of a dual economy led to steep declines in purchasing power of peso wages and standards of living, particularly for workers in the health and education sectors (Brundenius 2002, Eckstein 2004, Ritter and Rowe 2002). From 1968 to 1993, all but a few Cubans worked directly for the Cuban state and their peso salaries were standardized according to education and experience. This resulted in one of the most equitable salary structures existent in the world and allowed for exceptional gains for groups that previously had lower salaries due to gender and racial discrimination. The era of income equality based on peso salaries came to an abrupt end with "Special Period" economic reforms that established a dual peso-dollar economy. Since the establishment of the dual economy in 1993, dollars became a necessity. Workers continued to earn their salaries in Cuban pesos (moneda nacional), but most basic household goods (cooking oil, soap, detergent, toiletries) became available only in dollars through an extended network of "dollar stores" that appeared

across the island in concert with the legalization of the dollar. In November 2004, the convertible peso (CUC), the Cuban dollar-equivalent currency, replaced the U.S. dollar in official exchanges. This, however, did not change the dynamics of the dual economy or Cubans' uneven access to hard currency (*divisas*, i.e. CUC, U.S. dollars or other foreign currency received as incentives or circulating from tourism or remittances). Cubans without access to hard currency have to change part of their salary to convertible pesos each month to buy basic household necessities. The search for *divisas* through migration and remittances, change of occupation, and informal economic activities has distorted the relationship between training and education, experience, and earnings (Hammond 1999).

The introduction of the dual economy resulted in an inverted pay structure, whereby hotel workers and taxi drivers can earn salaries many times higher than surgeons and professors. Ritter and Rowe (2002) detailed five main sources of hard currency (U.S. dollars or Cuba's dollar equivalent, the CUC) that became available in the 1990s. These include remittances, the capture of tourist or remittance dollars circulating through the informal market or licensed self-employment, additional payments for Cubans working directly with foreigners (joint ventures, embassies, NGOs), allowances paid to professionals working or travelling abroad, and small monthly dollar incentives to workers in industries with a foreign partner and thus a hard currency cash flow or through key industries such as mining or construction. The incentive system is an important source of *divisas*, especially for households with little or no access to remittances or foreign tourists. More than one million Cuban workers received incentives averaging US\$19/month in 1999 (Ritter and Rowe 2002).

With the exception of a small percentage of workers who worked in health tourism, domestic workers in health care and education are explicitly excluded from access to hard currency incentives. The Cuban Foreign Investment act of September 1995 (popularly known as Act 77) established the terms of foreign investment in the previously extremely insulated Cuban economy, specifically excluding the health and education sectors from foreign investment (Brotherton 2008: 263-64). Before 2004, the limited options for health care workers to legally earn dollars included per diem allowances to attend conferences, work placements in Europe, or participating in smaller-scale international missions to Africa and Latin America (Warman 2001). Restrictions placed on Cuban medical personnel who wish to emigrate permanently further limit health workers' access to hard currency through migration and remittances. Cuban health care professionals are routinely denied exit visas to leave the island when they qualify under established legal channels, i.e. family reunification (U.S. Department of State).

As outlined above, Cuba's health system and its workers have served key ideological roles in the Cuban Revolution since its inception. The severe post-Soviet economic crisis and the establishment of a dual economy led to increasing stresses for Cuban households. A very small percentage of Cubans benefitted from the dual economy through jobs in tourism, foreign joint ventures, or through self-employment; a greater number were able to improve their household situation through remittances or informal activities (i.e. black- or gray-market sales or services). Health workers, for the most part, were excluded from these avenues to access the dollar economy, and their relative household income declined dramatically, even while their workload remained constant or increased. In the absence of current household income data, the following section uses data collected in 2000 to demonstrate the dramatic effect the dual economy had on health workers' incomes. The 2000 Havana Survey data presented below provide a window into the economic impact the international missions are likely having for a substantial number of Cuba's more than 522,000 health workers.

Domestic Repercussions of International Missions on Cuban Households and Communities

Cuban doctors have long been, and continue to be, among the highest paid workers in Cuba's peso economy (Ubell 1983). It is also important to recognize the key advantage that doctors and other health workers have in the "favor economy" (Brotherton 2008) that is prominent in socialist states. Their status and vital role in the community gives health workers the ability to "resolve" many of their household necessities outside of the formal monetary economy, without having to explicitly engage in informal (illegal) activities. The salaries of health workers, however, are limited to their peso earnings, placing them at a distinct disadvantage in the dual economy. It is in this context that the economic benefits associated with international missions become evident. While socios (client-based relations) can be a tremendous asset, they cannot resolve obtaining a car, computer, stereo, or sufficient extra income needed to repair one's home.

The uneven effects of Cuba's dual economy, specifically the degree to which health care professionals lost their position of economic privilege are clearly evidenced in the 2000 Havana Survey. The survey solicited demographic, professional and detailed income data for every member of the household, resulting in data for a total of 753 adults. It asked household heads for monthly income earned, in pesos and dollars, in three categories: state salary, self-employment, and informal economy ("other activities"), for each adult member of the household. The survey also asked for detailed information on remittances. This individual income information was then used to determine total household income. The economic situation of the 88 health workers who participated in the survey provides an empirical snapshots of the economic impact of the dual economy on workers in the domestic health sector. As such, it indicates the relative importance that hard currency earned through international missions has had for hard working professionals that have seen their salaries devalued and have been excluded from the dollar economy.

Doctors practicing at home were no longer among the highest paid professionals in Cuba, due to an incentive system that supplements the standardized wage scale (Tables 1-2). Individuals working in a range of other professions now earned higher salaries, including jobs such as "commerce", "computer sales", and "head of human resources." The majority (80%) of the top ten percent earners earned part of their salary as dollar incentives, which are not available to most health professionals in Cuba. Only the health workers associated with tourism, who receive dollar incentives as part of their salary, would be among the highest paid workers in the dual economy. None of those workers were represented in this sample. The \$50-\$100 CUC monthly incentives received by the internationalista households today would, however, once again place those households securely in the top income category. The first health professionals to serve abroad after international missions were expanded in 2003 were guaranteed a \$50 CUC incentive for the remainder of their career once returning from service, but according to a Cuban professional working with the families of the internationalistas, ongoing incentive benefits are no longer guaranteed (interview, Havana, June 7, 2007).

Given their high public profile, the nature of their work and social pressure from the oft-repeated expectation to be model revolutionary workers (Warman 2001), workers in the health and education sectors are less able to tap into common informal sources of extra income (i.e. sales of goods pilfered from the workplace or moonlighting in one's profession). The high profits that could be earned in formal and informal private businesses by workers outside of health and education further devaluated health workers' potential income (Table 2).

Annual Individual Salary Income (Pesos and U.S. Dollars)									
	Bottom 30% (\$72-\$131)		30-60% (\$132-\$181)		60-90% (\$182-\$349)		Top 10% (\$351-\$864)		Total
Doctor/Dentist	0	0.0%	0	0.0%	37	92.5%	3	7.5%	40
Nurse/Medical Technician/ Pharmacist	5	10.4%	33	68.8%	10	20.8%	0	0.0%	48
Total	5	5.7%	33	37.5%	47	53.4%	3	3.4%	88

Source: 2000 Havana Survey

Table 1: Individual Annual Peso Salary Earned by Cuban Health Workers

Annual Individual Income from Salary and Informal Income									
	Bottom 30% (\$72-\$144)		30-60% (\$145-\$221)		60-90% (\$222-\$499)		Top 10% (\$500-\$2088)		Total
Doctor/Dentist	0	0.0%	5	12.5%	32	80.0%	3	7.5%	40
Nurse/Medical Technician/ Pharmacist	17	35.4%	24	50.0%	7	14.6%	0	0.0%	48
Total	8	19.3%	11	33.0%	39	44.3%	3	3.4%	88

Source: 2000 Havana Survey

Table 2: Total Annual Individual Income Earned from Salary and Informal Income by Cuban Health Workers

In the 2000 Havana sample, 21% of households reported extra income from the informal economy—most likely an underreporting of the actual number given the illicit nature of many kinds of earnings. The great majority of health workers in this sample did not report any informal earnings—only 6 of 88 (7%) health workers in the study reported informal earnings on the side. Two doctors and one dentist earned more than US\$500 annually through their informal activities, placing them in the top 10% income bracket. One doctor worked “as a barber, doing some bricklaying, carpentry, or whatever presents itself” and a second recorded music and video cassettes for rent and sale. In a rare case of moonlighting, one dentist earned an extra US\$100 per month working in a clandestine dental practice, in addition to the 365 pesos (US\$18.25) she earned in her day job. The fact that licensed self-employment is strictly forbidden in the health sector further limits the earning potential of health workers, as the moonlighting dentist’s case illustrates.

A detailing of the individual income of 88 health workers demonstrates how the dual economy had devalued the wages of domestic health workers. Before working on an international mission abroad became a widely available option for medical personnel, doctors in particular had experienced a dramatic decline in their earnings relative to those with dollar hard currency earnings. While their peso salaries remained relatively high, they did not receive incentive payments or engage as freely in informal activities that boosted the income of workers in other sectors. In Cuba’s dual economy, in the absence of hard-currency incentives and higher pay offered to internationalistas, the wages of nurses and medical technicians were devalued to the point of placing them in the bottom half of earners in Cuba’s dual economy.

A second impact of expanded international missions has been a reduction in the number of doctors working on the domestic front and a subsequent restructuring

of the health care system. Increased demands on family doctors and nurses strained Cuba's lauded block-level preventative and health promotion approach to health care. In Cuban communities, the temporary assignment of tens of thousands of Cuba's medical personnel overseas led to rising dissatisfaction among Cuban residents who were used to having a family doctor on every urban block. The family doctor program, initiated in the 1980s, established a doctor/nurse team on every block who was familiar with and attentive to health concerns at the individual level. The international missions resulted in shortages of medical personnel at home and closings of family doctor offices (De Vos et al. 2008). High turnover and fewer health care workers was a sharp contrast to previous norms of extremely high accessibility, stability and familiarity. While health indicators have not declined, frustration levels with longer waiting times and shorter hours of consultation at family doctor offices is a tangible consequence of international missions on the Cuban street.

In response to rising discontent and medical personnel shortages, the Cuban government recently restructured its health care system. Reforms announced in April 2008 reorganized the island's public health care system. Rather than guaranteeing a doctor for every 500-700 residents (one doctor per urban block), Cuba now provides a neighborhood health system that is focused on the polyclinic (intermediate care, between family doctors and hospitals), which is designed to attend to the needs of around 6,000 residents (Frank 2008). Even prior to the April 2008 reforms, the Cuban state had committed significant resources to renovating and supplying the country's 444 polyclinics with modern medical equipment (i.e. x-ray, endoscopy, ultrasound) (De Vos et al. 2008). To reinforce staffing in the polyclinics, more medical students—including foreign students receiving a free medical education at the Latin American School of Medicine—are now sent to polyclinics for their residency. While the polyclinics are strengthened, the family doctor program has been curtailed. Many family doctor offices in Havana are now closed, with the remaining consolidated offices designated to serve between 1,500 and 2,000 residents (De Vos 2008, Feinsilver 2008, Frank 2008). In the promotion of internationally-focused goals of humanitarianism that have promoted political support and economic advancement for the state, Cubans have had to adjust to a new era of health care provision at home.

A detailing of the individual and household income of 88 health workers shows decisively that the dual economy has devalued the wages of health workers. When considering earnings from informal activities and incentive payments that most health workers do not engage in or receive, doctors working in Cuba were no longer among the country's highest paid workers. The wages of nurses and medical technicians placed them in the bottom half of earners in Cuba's dual economy. The need for hard currency and their inability to earn it legitimately is clearly a factor in individual health care workers' decisions to endure difficult two-year assignments abroad. When tens of thousands of health workers accepted temporary overseas posts, their absence was acutely felt at home. Though health indicators have not declined, Cubans who were used to the highest and most accessible doctor-to-patient ratios in the world are now adapting to a restructured health system that can accommodate an expanded medical presence abroad.

Conclusion

The massive expansion of international missions highlights the challenges faced by Cuban policy makers to exploit its human capital and promote positive international diplomacy while also providing sustainable economic options for Cuban professionals at home. Studies on international medical missions have emphasized the political and humanitarian dimensions of Cuban international missions and the moral incentives that health workers have to participate in them (Bustamante & Sweig 2008,

Feinsilver 2006, 2008, Huish and Kirk 2007, Kirk & Erisman 2009, Saney 2009). While not denying important moral and career-related incentives, it is essential also to recognize and understand the monetary incentives that underlie the missions. With origins in a long tradition of humanitarian international solidarity, Cuban medical missions have evolved recently into a key source of hard income for the Cuban state. Working abroad is also a financial boon for individual doctors and other health professionals who have seen their peso salaries devalued at home. Two-year missions represent an important opportunity for workers with no other access to the dollar economy to alleviate their household finances. Shortages of health care workers at home have also led to the restructuring of Cuba's much-touted "family doctor on every block" health care program.

International missions have affected the Cuban state and its people in a myriad of ways. At the international level, international missions have had three principle outcomes. They have garnered good will and solidarity for the Cuban government, exported socialist principles abroad and consolidated them at home, and, recently, have earned hard currency for the Cuban state and increased economic security for many professional workers in key sectors at home. At the ground level, since 2003 Venezuelan funding has led to an amplification of Cuban international missions that have given tens of thousands of Cuban health workers the opportunity to earn hard currency through two-year missions abroad. Given the higher pay and generous benefits associated with international missions, these positions are coveted by Cuban professionals. Many of the internationalistas are professionals that had been otherwise disadvantaged by the dual economy. Household survey data from December 2000 makes explicit the dramatic drop in standard of living experienced by doctors and other health professionals working in Cuba, while at the same time experiencing an increasingly stressful work climate due to the economic crisis. Against this economic backdrop, the substantive hard currency earnings (i.e. CUC incentive payments) that participating in international missions provide can dramatically change the economic situation of a health worker's household for the better, all while gaining experience and prestige in one's elected occupation. Significant economic gains for professional households also results in ideological gain for the Cuban state, as the specialists who serve abroad often return with revolutionary passion and renewed commitment to the goals of the revolution. Cuban women, blacks and mulatos are well-represented in the internationalist effort as a result of their professional advances under national gender and race politics that emphasized equality. Although expanded opportunities to work in overseas missions has ameliorated many health care workers' disadvantaged situation, it has created a new set of social tensions and led to a re-organization of the health care system at home.

By analyzing the impact of Cuba's humanitarian overseas missions at different scales, this study highlights the roots of Cuban internationalism in specific policy initiatives, including the development of a universal and person-based public health system and international solidarity. It also emphasizes the economic gains for both the state and for Cuban internationalist households whose lack of access to hard currency in a dual economy motivates them to seek hard currency abroad. While the future of large-scale international missions is not certain, dependent as they are on continued third-party funding; their influence is clearly visible in Cuban society today.

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Notes

¹ See the section “Economic Crisis, Dual Economy and Economic Vulnerability” below for a description of Cuba’s dual economy and the various types of currency that circulate in the Cuban economy.

² Interview with Ernesto (pseudonym), a Cuban employee who works directly with international aid workers, Havana, June 7, 2007.

³ Included in the “doctor” category are two dentists (dentists also regularly participate in international missions). One dentist was a white woman and one a black man.

⁴ Using racial categories common to Cuba, interviewees were asked to classify themselves and each family member as “White” (blanco), “olive-skinned” (trigueño), “mixed” mestizo, mulato, jabao, or “black” (negro). Given the inherent subjectivity of race and the socially-constructed nature of racial definitions, “race” is a slippery social category to quantify. In the Cuban case, a light-skinned person of both Spanish and African descent may alternatively identify him or herself as trigueño, mestizo, or mulato depending on the context and on who is asking. For simplicity, I have grouped those people identified as “White” or “olive-skinned” as White; those identified as “mixed”, mulato, or jabao as mulato; and those identified as “black” as black in the following discussion. Of the 643 adults in the sample population, aged 18–65, whose race was identified by the head of the household, 54% were White, 26% were mulato and 20% were black. Of the 82 health workers whose race was reported, 38% were classified as White, 40% as “mulato”, and 22% black.

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